

Form PTO-1449 (Rev. 8-83) (modified)  <b>INFORMATION DISCLOSURE CITATION</b> (See several sheets if necessary)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 13226US02	SERIAL NO. 09/898,850
	APPLICANT(s): Ungerboeck			
	FILING DATE July 3, 2001		GROUP ART UNIT: 2681	

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	A1	5,268,961	12/07/93	Ng	380	19	_____
DH	A2	5,528,628	06/18/96	Park et al.	375	240	_____
DH	A3	5,559,561	09/24/96	Wei	348	470	_____
DH	A4	5,914,840	06/22/99	Kawakami et al.	360	130.23	_____

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NO.	PUBLICATION DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

RECEIVED

FEB 28 2002

Technology Center 2600

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
DH	C1	Kschischang, "Optimal Nonuniform Signaling for Gaussian Channels," <i>IEEE Transactions on Information Theory</i> , 39(3):913-929 (May 1993)

EXAMINER	DATE CONSIDERED:
<i>[Signature]</i>	10/25/04
*EXAMINER: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	





PTO/SB/08A (08-03)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

USPTO Form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>	
			Application Number	09/898,850
			Filing Date	July 3, 2001
			First Named Inventor	Gottfried Ungerboeck
			Group Art Unit	2681
			Examiner Name	Not assigned
			Attorney Docket Number	13226US02
Sheet	1	of	1	

U.S. PATENT DOCUMENTS					
Examiner Initial*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1				<b>RECEIVED</b>  <b>APR 12 2004</b>  <b>Technology Center 2600</b>
	A2				
	A3				
	A4				
	A5				
	A6				

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
DA	A7	DE 197 48 880 C 1	05/12/1999	DEUTSCHE TELEKOM AG	Col. 2, line 17 - line 22; Col. 3, line 41 - 44	
	A8					
	A9					
	A10					
	A11					

OTHER ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
DA	A12	B. Vasic et al., "Scrambling for Nonequiprobable Signalling", Electronics Letters, IEE Stevenage, GB, vol. 32, no. 17, August 15, 1996, pages 1551-1552.
	A13	
	A14	
	A15	
	A16	

EXAMINER SIGNATURE		DATE CONSIDERED	10/25/04
-----------------------	---	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1800-786-9199) and select option 2.